LISTING OF THE CLAIMS

This listing of the claims supersedes all previous listing.

1. (Currently Amended) An automated method of classifying a cytological sample, comprising:

providing a cytological sample in solution in a vessel;

optically interrogating the solution with at least one wavelength of light;

determining whether comparing a result of said interrogation to meets a criterion;

attaching a positive designator to the sample vessel if the result meets the criterion; and

attaching a manipulation designator to the sample <u>vessel</u> if the result does not meet the criterion.

- 2. (Currently Amended) The method of claim 1, wherein the positive designator designates the sample as satisfactory for performing an intended assay.
- 3. (Currently Amended) The method of claim ± 2 , wherein <u>performance of</u> the <u>intended</u> assay comprises preparing a <u>specimen</u> slide from said sample.
- 4. (Currently Amended) The method of claim 3 2, wherein the sample meets the criterion is satisfactory if it contains sufficient cells for performing the assay.
- 5. (Currently Amended) The method of claim 4, wherein the cells are of a desired prokaryotic, eukaryotic, or archea type cells.
- 6. (Currently Amended) The method of claim 1, wherein the positive designator designates indicates that the sample as is satisfactory for automated slide preparation.
- 7. (Currently Amended) The method of claim 1, wherein the positive designator designates indicates that the sample as is adequate in quantity to allow for withdrawal of a portion of the sample for prior to performing an intended assay.

- 8. (Currently Amended) The method of claim 1, wherein the manipulation designator designates the indicates that acquisition of an additional sample is needed for performing an assay.
- 9. (Currently Amended) The method of claim 1, wherein the manipulation designator designates a indicates that treatment of the sample is needed prior to performing an assay.
- 10. (Original) The method of claim 9, wherein the treatment comprises adding acetic acid to the sample.
- 11. (Original) The method of claim 9, wherein the treatment comprises adding a reducing agent to the sample.
- 12. (Currently Amended) The method of claim 1, wherein the criterion indicates is a concentration of cells in the sample.
- 13. (Currently Amended) The method of claim 1, wherein the criterion indicates is a concentration of cells of a particular type in the sample.
 - 14. (Original) The method of claim 13, wherein the cells are endocervical cells.
- 15. (Currently Amended) The method of claim 1, wherein the criterion indicates is a level of mucus in the sample.
- 16. (Currently Amended) The method of claim 1, wherein the criterion indicates is a level of blood in the sample.
 - 17. Canceled.
- 18. (Original) The method of claim 1, wherein the sample is mixed prior to optically interrogating the solution.

- 19. (Currently Amended) The method of claim 47 18, wherein the mixing is performed manually.
- 20. (Currently Amended) The method of claim 47 18, wherein the mixing is performed automaticallyed.
- 21. (Currently Amended) The method of claim 1, wherein the positive designator comprises a marking on the vessel.
- 22. (Original) The method of claim 1, wherein the positive designator comprises a designation in an electronic memory.
- 23. (Original) The method of claim 1, wherein the manipulation designator comprises a marking on the vessel.
- 24. (Original) The method of claim 1, wherein the manipulation designator comprises a designation in an electronic memory.
- 25. (Currently Amended) The method of claim 1, wherein the method is performed simultaneously in temporal conjunction with obtaining the sample from a subject.
- 26. (Currently Amended) The method of claim 24 <u>25</u>, wherein the method is performed in conjunction with obtaining the sample from a subject prior to the subject leaving the point of sampling.
- 27. (Original) The method of claim 1, further comprising preparing a slide from the sample after removing said portion.
- 28. (Original) The method of claim 1, wherein the sample is selected from the group consisting of blood; urine; semen; milk; sputum; mucus; plueral fluid; pelvic fluid; sinovial fluid; ascites fluid; a body cavity wash; eye brushing; skin scrapings; a buccal swab; a

vaginal swab; a pap smear; a rectal swab; an aspirate; a needle biopsy; a section of tissue; plasma; serum; spinal fluid; lymph fluid; an external secretion of the skin, respiratory, intestinal, or genitourinary tract; tears; saliva; a tumor; an organ; a microbial culture; and an in vitro cell culture constituent.

29. (Original) The method of claim 1, wherein the sample comprises a water-soluble alcohol in an amount effective to preserve the sterility of the solution toward at least one contaminant.